SECTION I - TOWARD A HEALTHIER AMERICA

# CHAPTER I INTRODUCTION AND SUMMARY

The health of the American people has never been better.

In this century we have witnessed a remarkable reduction in the life-threatening infectious and communicable diseases.

Today, seventy-five percent of all deaths in this country are due to degenerative diseases such as heart disease, stroke and cancer (Figure 1-A). Accidents rank as the most frequent cause of death from age one until the early forties. Environmental hazards and behavioral factors also exact an unnecessarily high toll on the health of our people. But we have gained important insights into the prevention of these problems as well.

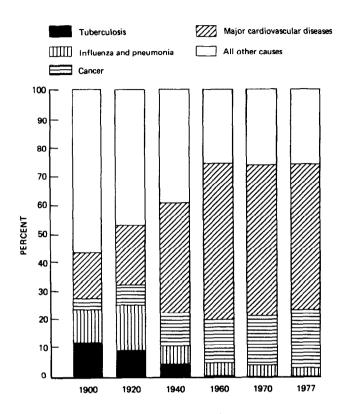
It is the thesis of this report that further improvements in the health of the American people can and will be achieved—not alone through increased medical care and greater health expenditures—but through a renewed national commitment to efforts designed to prevent disease and to promote health. This report is presented as a guide to insure even greater health for the American people and an improved quality of life for themselves, their children and their children's children.

## Americans Today are Healthier Than Ever

Since 1900, the death rate in the United States has been reduced from 17 per 1,000 persons per year to less than nine per 1,000 (Figure 1-B). If mortality rates for certain diseases prevailed today as they did at the turn of the century, almost 400,000 Americans would lose their lives this year to tuberculosis, almost 300,000 to gastroenteritis, 80,000 to diphtheria, and 55,000 to poliomyelitis. Instead, the toll of all four diseases will be less than 10,000 lives.

FIGURE 1-A

## DEATHS FOR SELECTED CAUSES AS A PERCENT OF ALL DEATHS: UNITED STATES, SELECTED YEARS, 1900-1977

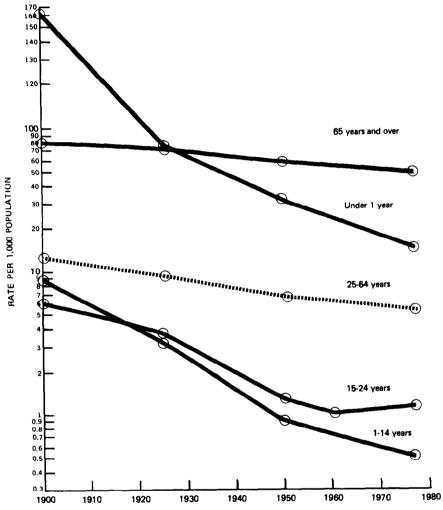


NOTE: 1977 data are provisional; data for all other years are final.

Source: National Center for Health Statistics, Division of Vital Statistics

FIGURE 1B

DEATH RATES BY AGE: UNITED STATES,
SELECTED YEARS 1900-1977



NOTE: 1977 data are provisional, data for all other years are final. Selected years are 1900, 1925, 1950, 1960 (for age group 15-24 years only), and 1977.

SOURCE: National Center for Health Statistics, Division of Vital Statistics.

We have seen other impressive gains in health status in the past few years.

- In 1977, a record low of 14 infant deaths per 1,000 live births was achieved.
- Between 1960 and 1975, the difference in infant mortality rates for nonwhites and whites has cut in half.
- Between 1950 and 1977, the mortality rate for children aged one to 14 was halved.
- A baby born in this country today can be expected to live more than 73 years on average, while a baby born in 1900 could be expected to live only 47 years.
- Deaths due to heart disease decreased in the United States by 22 percent between 1968 and 1977.
- During the past decade the expected life span for Americans has increased by 2.7 years. In the previous decade it increased by only one year.

For this, much of the credit must go to earlier efforts at prevention, based on new knowledge which we have obtained through research. Nearly all the gains against the once-great killers--which also included typhoid fever, smallpox, and plague--have come as the result of improvements in sanitation, housing, nutrition, and immunization. These are all important to disease prevention.

But some of the recent gains are due to measures people have taken to help themselves--changes in lifestyles resulting from a growing awareness of the impact of certain habits on health.

#### Can We Do Better?

To be sure, as a Nation we have been expending large amounts of money for health care.

- From 1960 to 1978 our total spending as a Nation for health care mushroomed from \$27 billion to \$192 billion.
- In 1960 we spent less than six percent of our GNP on health care. Today, the total is about nine percent. Almost 11 cents of every federal dollar goes to health expenditures.
- In the years from 1960 to 1978 annual health expenditures increased over 700 percent.

Yet, our 700 percent increase in health spending has not yielded the striking improvements over the last 20 years that we might have hoped for. To a great extent these increased expenditures have been directed to treatment of disease and disability, rather than prevention.

Though, particularly in recent years, we have made strides in prevention, much is yet to be accomplished.

For example, recent figures indicate that we still lag behind several other industrial nations in the health status of our citizens:

- 12 others do better in preventing deaths from cancer;
- 26 others have a lower death rate from circulatory disease;
- 11 others do a better job of keeping babies alive in the first year of life; and
- 14 others have a higher level of life expectancy for men and six others have a higher level for women.

#### Prevention - An Idea Whose Time Has Come

Clearly, the American people are deeply interested in improving their health. The increased

attention now being paid to exercise, nutrition, environmental health and occupational safety testify to their interest and concern with health promotion and disease prevention.

The linked concepts of disease prevention and health promotion are certainly not novel. Ancient Chinese texts discussed ways of life to maintain good health--and in classical Greece, the followers of the gods of medicine associated the healing arts not only with the god Aesculapius but with his two daughters, Panacea and Hygeia. While Panacea was involved with medication of the sick, her sister Hygeia was concerned with living wisely and preserving health.

In the modern era, there have been periodic surges of interest leading to major advances in prevention. The sanitary reforms of the latter half of the 19th century and the introduction of effective vaccines in the middle of the 20th century are two examples.

But, during the 1950s and 1960s, concern with the treatment of chronic diseases and lack of knowledge about their causes resulted in a decline in emphasis on prevention.

Now, however, with the growing understanding of causes and risk factors for chronic diseases, the 1980s present new opportunities for major gains.

Prevention is an i'ea whose time has come. We have the scientific knowledge to begin to formulate recommendations for improved health. And, although the degenerative diseases differ from their infectious disease predecessors in having more--and more complex--causes, it is now clear that many are preventable.

### Challenges for Prevention

We are now able to identify some of the major risk factors responsible for most of the premature morbidity and mortality in this country.

#### Cigarette Smoking

<u>Cigarette smoking is the single most preventable cause of death.</u> It is clear that cigarette smoking causes most cases of lung cancer—and that fact is underscored by a consistent decline in death rates from lung cancer for former male cigarette smokers who have abstained for 10 years or more.

Cigarette smoking is now also identified as a major factor increasing risk for heart attacks. Even in the absence of other important risk factors for heart disease—such as high blood pressure and elevated serum cholesterol—smoking nearly doubles the risk of heart attack for men.

Though the actual cause of the unprecedented decline in heart disease in the last ten years is not entirely understood, it is noteworthy that the prevalence of these three risk factors also declined nationally during this same period.

#### Alcohol and Drugs

Misuse of alcohol and drugs exacts a substantial toll of premature death, illness, and disability.

Alcohol is a factor in more than 10 percent of all deaths in the United States. The proportion of heavy drinkers in the population grew substantially in the 1960s, to reach the highest recorded level since 1850.

Of particular concern is the growth in use of both alcohol and drugs among the Nation's youth.

Problems resulting from these trends are substantial—but preventable. Our ability to deal with them depends, in many ways, more on our skills in mobilizing individuals and groups working together in the schools and communities, than on the efforts of the health care system.

#### Occupational Risks

Also more widely recognized as threats to health are certain occupational hazards. In fact, it is now estimated that up to 20 percent of total cancer mortality may be associated with these hazards. The true dimensions of the asbestos hazard, for example, have become manifest only after a latency period of perhaps 30 years.

And rubber and plastic workers, as well as workers in some coke oven jobs, are exhibiting significantly higher cancer rates than the general population.

Yet, once these occupational hazards are defined, they can be controlled. Safer materials may be substituted; manufacturing processes may be changed to prevent release of offending agents; hazardous materials can be isolated in enclosures; exhaust methods and other engineering techniques may be used to control the source; special clothing and other protective devices may be used; and efforts can be made to educate and motivate workers and managers to comply with safety procedures.

#### Injuries

Injuries represent still another area in which the toll of human life is great.

Accidents account for roughly 50 percent of the fatalities for individuals between the ages of 15 to 24. But the highest death rate for accidents occurs among the elderly, whose risk of fatal injury is nearly double that of adolescents and young adults.

In 1977, highway accidents killed 49,000 people and led to 1,800,000 disabling injuries. In 1977, firearms claimed 32,000 lives, and were second only to motor vehicles as a cause of fatal injury.

Falls, burns, poisoning, adverse drug reactions and recreational accidents all accounted for a significant share of accident-related deaths.

Again, the potential to reduce these tragic and avoidable deaths lies less with improved medical care than with better Federal, State, and local actions to foster more careful behavior, and provide safer environments.

Smoking, occupational hazards, alcohol and drug abuse, and injuries are examples of the prominent challenges to prevention, and there are many others.

But the clear message is that much of today's premature death and disability can be avoided.

And the effort need not require vast expenditures of dollars. In fact, modest expenditures can yield high dividends in terms of both lives saved and improvement in the quality of life for our citizens.

#### A Reordering of our Health Priorities

In 1974, the Government of Canada published A New Perspective on the Health of Canadians. It introduced a useful concept which views all causes of death and disease as having four contributing elements:

- inadequacies in the existing health care system;
- behavioral factors or unhealthy lifestyles;
- environmental hazards; and
- human biological factors.

Using that framework, a group of American experts developed a method for assessing the relative contributions of each of the elements to many health probl s. Analysis in which the method was applied to the 10 leading causes of death in 1976 suggests that perhaps as much as half of U.S. mortality in 1976 was due to unhealthy behavior or lifestyle; 20 percent to environmental factors; 20 percent to human biological factors; and only 10 percent to inadequacies in health care.

Even though these data are approximations, the implications are important. Lifestyle factors should be amenable to change by individuals who understand and are given support in their attempts to change. Many environmental factors can be altered at relatively low costs. Inadequacies in disease treatment should be correctable within the limits of technology and resources as they are identified. Even some biological factors (e.g., genetic disorders) currently beyond effective influence may ultimately yield to scientific discovery. There is cause to believe that further gains can be anticipated.

The larger implication of this analysis is that we need to re-examine our priorities for national health spending.

Currently only four percent of the Federal health dollar is specifically identified for prevention related activities. Yet, it is clear that improvement in the health status of our citizens will not be made predominately through the treatment of disease but rather through its prevention.

This is recognized in the growing consensus about the need for, and value of, disease prevention and health promotion.

Several recent conferences at the national level have been devoted to exploring the opportunities in prevention. Professional organizations in the health sector are re-evaluating the role of prevention in their work.

The President and the Secretary of Health, Education, and Welfare have made strong public endorsements of prevention. And a rapidly growing interest has emerged in the Congress.

The Federal interest is paralleled by great interest in the State health agencies.

There are three overwhelming reasons why a new, strong emphasis on prevention—at all levels of governments and by all our citizens—is essential.

First, prevention saves lives.

Second, prevention improves the quality of life.

Finally, it can save dollars in the long run. In an era of runaway health costs, preventive action for health is cost-effective.

#### Prevention - A Renewed Commitment

In 1964, a Surgeon's General's Report on Smoking and Health was issued. This report pointed to the critical link between cigarette smoking and several fatal or disabling diseases. In 1979, another report was issued based on the knowledge gained from over 24,000 new scientific studies—studies which revealed that smoking is even more dangerous than initially supposed.

In recent years, our knowledge of important prevention measures in other critical areas of health and disease has also increased manyfold.

This, the first Surgeon General's Report on Health Promotion and Disease Prevention, is far broader in scope than the earlier Surgeon General's reports.

It is the product of a comprehensive review of prevention activities by participants from both the public and private sectors. The process has involved scientists, educators, public officials, business and labor representatives, voluntary organizations, and many others.

Preparation of the report was a cooperative effort of the health agencies of the Department of Health, Education, and Welfare, aided by papers from the National Academy of Sciences' Institute of Medicine and the 1978 Departmental Task Force on Disease Prevention and Health Promotion. Core papers from both documents are available separately as background papers to this report.

The report's central theme is that the health of this Nation's citizens can be significantly improved through actions individuals can take themselves, and through actions decision makers in the public and private sector can take to promote a safer and healthier environment for all Americans at home, at work and at play.

For the individual often only modest lifestyle changes are needed to substantially reduce risk for several diseases. And many of the personal decisions required to reduce risk for one disease can reduce it for others.

Within the practical grasp of most Americans are simple measures to enhance the prospects of good health, including:

- elimination of cigarette smoking;
- reduction of alcohol misuse:
- moderate dietary changes to reduce intake of excess calories, fat, salt and sugar;
- moderate exercise;
- periodic screening (at intervals determined by age and sex) for major disorders such as high blood pressure and certain cancers: and
- adherence to speed laws and use of seat belts.

Widespread adoption of these practices could go far to improve the health of our citizens.

Additionally, it is important to emphasize that physical health and mental health are often linked. Both are enhanced through the maintenance of strong family ties, the assistance of supportive friends, and the use of community support systems.

For decision makers in the public and private sector, a recognition of the relationship between

health and the physical environment can lead to actions that can greatly reduce the morbidity and mortality caused by accidents, air, water and food contamination, radiation exposure, excessive noise, occupational hazards, dangerous consumer products and unsafe highway design.

The opportunities are, therefore, great. But if those opportunities are to be captured we must be focused in our efforts.

An important purpose of this report is to enhance both individual and national perspective on prevention through identification of priorities and specification of measurable goals.

Americans have a deep interest in improving their health. This report is offered to help them achieve that goal.